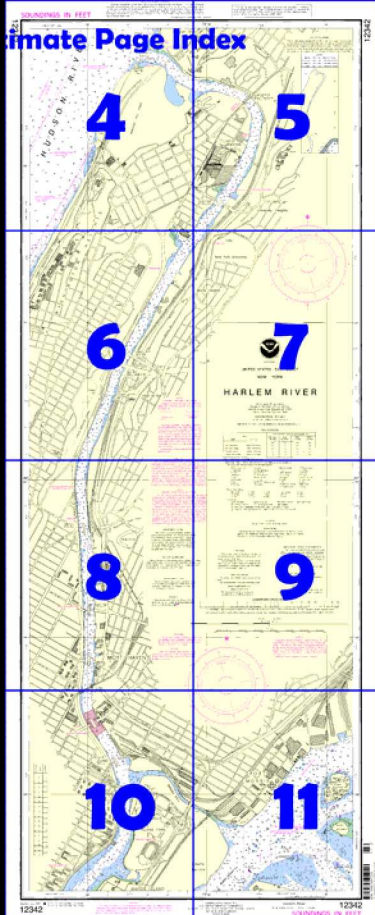


BookletChartTM

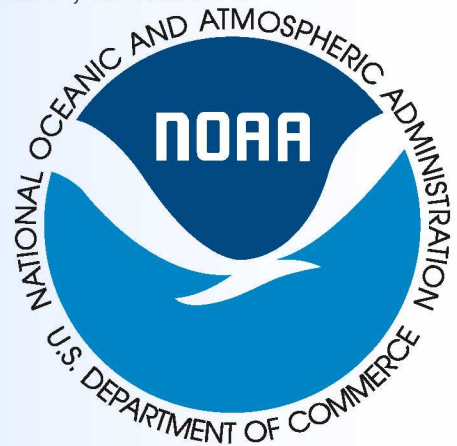
Harlem River

(NOAA Chart 12342)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☒ Complete, reduced scale nautical chart
- ☒ Print at home for free
- ☒ Convenient size
- ☒ Up to date with all Notices to Mariners
- ☒ United States Coast Pilot excerpts
- ☒ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

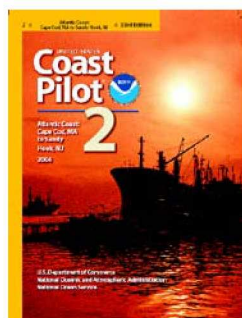
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 2, Chapter 9 excerpts]

(109) Navigation of the channels in the Port of New York and New Jersey is not restricted by ice. The main channels do not freeze over, and any ice in the smaller waterways is well broken up by tugs and general traffic. Freshwater ice is brought down the Hudson River in large floes during periods of thaws or winter freshets. Occasionally there are large accumulations of ice at Spuyten Duyvil where Harlem River joins the Hudson, and at such times it is difficult for low-powered vessels or

tows to make much headway. Under conditions of strong winds the slips on the exposed side of the channel become packed with drift ice, causing difficulty when maneuvering in the slip or when berthing. During extremely severe winters navigation is interfered with seriously for only short periods of time.

(385) **East River** is a 14-mile-long tidal strait that connects Long Island Sound with New York Upper Bay and separates the western end of Long Island from the New York mainland. The Sound entrance is between Throgs Neck and Willets Point; the Upper Bay entrance is between The Battery and Governors Island. Hell Gate, about halfway between Throgs Neck and The Battery, is noted for its strong tidal currents. Harlem River extends northward from Hell Gate to the Hudson River. Both sides of the East River, from The Battery to Port Morris, a distance of 9 miles, present an almost continuous line of wharves except where shoals or currents prevent access.

(454) **Harlem River**, which joins East River in Hell Gate between Wards Island and Manhattan Island, extends northward about 7 miles and connects with Hudson River through Spuyten Duyvil Creek. The channel through Harlem River is narrow, tortuous, and navigable only for powered vessels. By taking care to avoid several isolated 11- to 13-foot spots, a depth of about 14 feet can be carried to the Hudson River; the chart is the guide.

(455) Traffic is heavy in Harlem River. Vessels with heights too great to pass under the closed drawbridges should make the passage against the current.

(456) There are more than a dozen draw and fixed bridges over Harlem River. The minimum clearance under closed drawspans is 24 feet except at the railroad bridge over the entrance from Hudson River where it is only 5 feet. Clearance under raised vertical-lift spans exceed 100 feet. (See 117.1 through 117.59 and 117.789, chapter 2, for drawbridge regulations.) Minimum clearances under fixed bridges exceeds 100 feet at the center of the spans.

(457) Four bridges over the Harlem River, the 103rd Street lift bridge, the Triborough lift bridge, the Park Avenue lift bridge, and the Conrail swing bridge at Spuyten Duyvil, at 0.1 mile, 1 mile, and 1.7 miles, and 6.7 miles, respectively, above the entrance, are equipped with radiotelephones. The bridgetenders monitor VHF-FM channel 13; call signs KIL-820, KGW-326, and KA-5059, and KU-9797, respectively. The Conrail bridge is maintained in the open position except for the passage of trains or for maintenance.

(458) The mean range of tide in Harlem River is 5.1 feet in Hell Gate and 3.6 feet at the entrance from Hudson River.

(459) The tidal currents in Harlem River run southward from Hudson River to East River while the east-going current is running in Hell Gate; and the reverse. The south-going current in Harlem River is considered the flood. The times of slack water are subject to variations depending upon freshet conditions in Hudson River. The velocity of the current is 2 knots or more in the narrower parts of the channel. (See the Tidal Current Tables for predictions.)

Table of Selected Chart Notes

HEIGHTS

Heights in feet above Mean High Water.

Corrected through NM Jan. 01/05
Corrected through LNM Dec. 21/04

CAUTION

Fixed and floating obstructions, some submerged, may exist within the magenta tinted bridge construction area. Mariners are advised to proceed with caution.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 2 for important supplemental information.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.


During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

New York, NY KWO-35 162.55 MHz

FISH TRAP AREAS

Boundary lines of fish trap areas are shown thus: 

Submerged piling may exist in these areas.

CAUTION

SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

 Pipeline Area  Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.362" northward and 1.511" eastward to agree with this chart.

RADAR REFLECTORS


Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

PLANE COORDINATE GRID

(based on NAD 1927)

The New York State Grid is indicated by dotted ticks at 5,000 foot intervals.

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus: 

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in New York, N.Y.
Refer to charted regulation section numbers.

NOTE B

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the New York Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. Mariners should consult these sources for applicable rules and reporting requirements. Although mandatory VTS participation is limited to the navigable waters of the United States, certain vessels are encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate vessel traffic management within the VTS area.

NOTE Z

NO-DISCHARGE ZONE, 40 CFR 140

Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910 - 3282.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated).

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	OC occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.

(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

TIDAL INFORMATION

Place (Lat/Long)	Height referred to datum of soundings (MLLW)			
	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
East 110th Street (40°47'N/73°56'W)	5.7 feet	5.4 feet	0.2 feet	-4.0 feet
Washington Bridge (40°51'N/73°56'W)	4.9	4.6	0.2	-3.5
Broadway Bridge (40°52'N/73°55'W)	4.3	4.0	0.2	-3.5
Spuyten Duyvil Creek (40°53'N/73°56'N)	4.3	4.0	0.2	-4.0

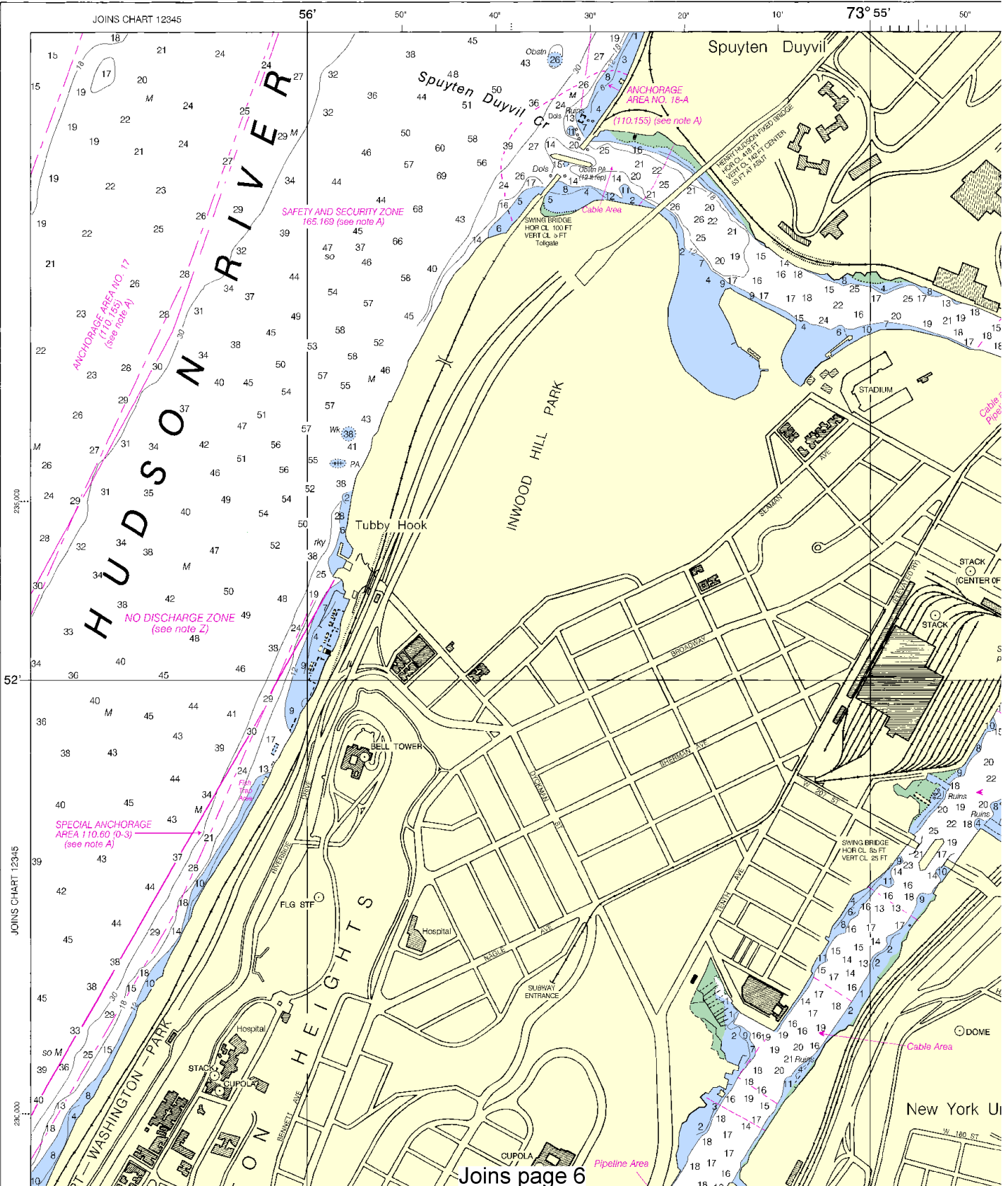
(Mar 1996) Latest available information

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, <http://NauticalCharts.gov>, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, <http://OceanGrafix.com>, or help@OceanGrafix.com.

Formerly C&GS 274, 1st Ed., Nov. 1988 K

12342



Joins page 6

Printed at reduced scale. ~~SCALE 1:10,000~~
Nautical Miles

See Note on page 5.

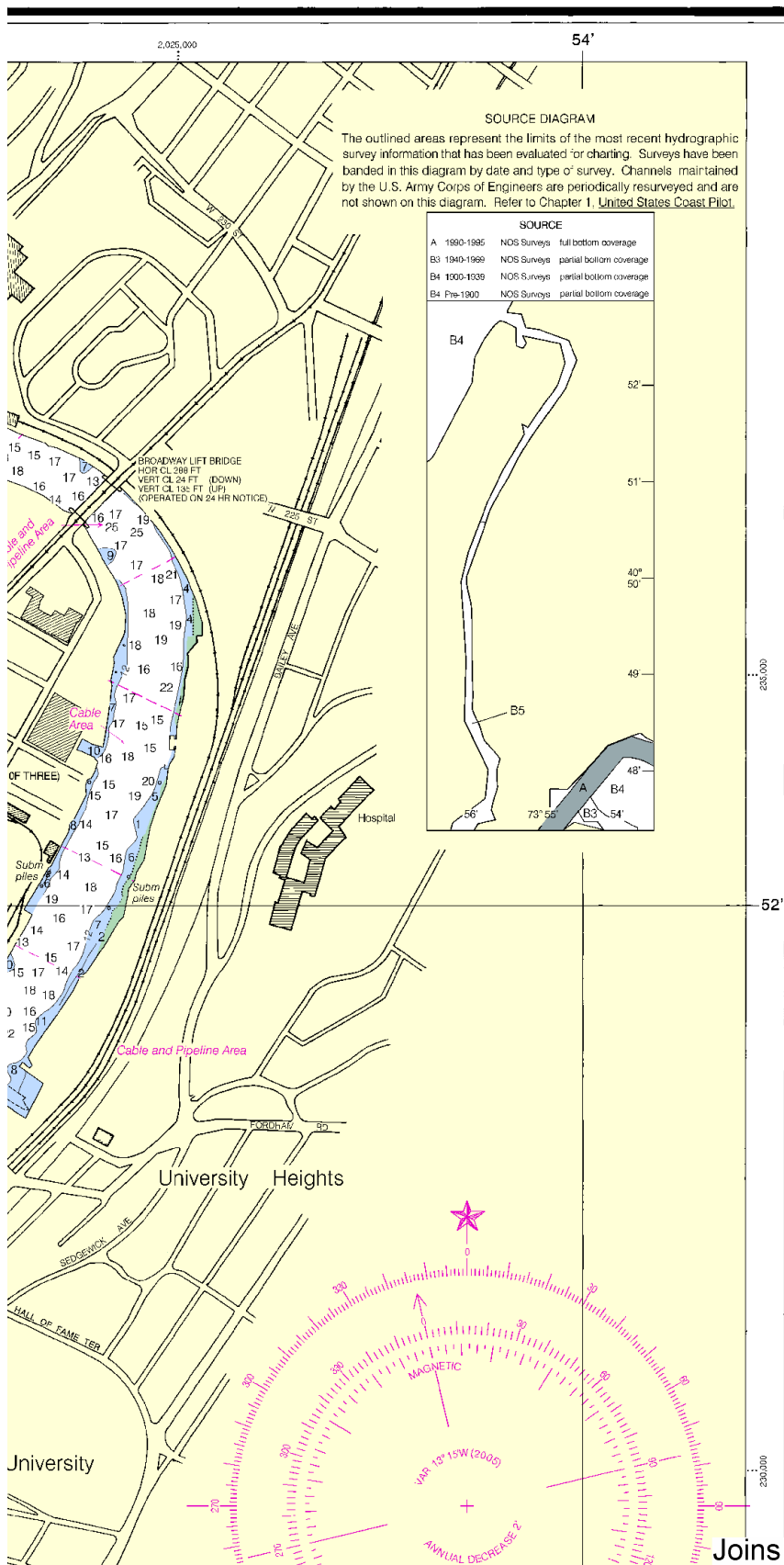
0
Yards

A horizontal number line starting at -200 and ending at 1200. Major tick marks are labeled at intervals of 200: -200, 0, 200, 400, 600, 800, 1000, and 1200. There are also minor tick marks between the major ones, representing increments of 100.

North

4

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.



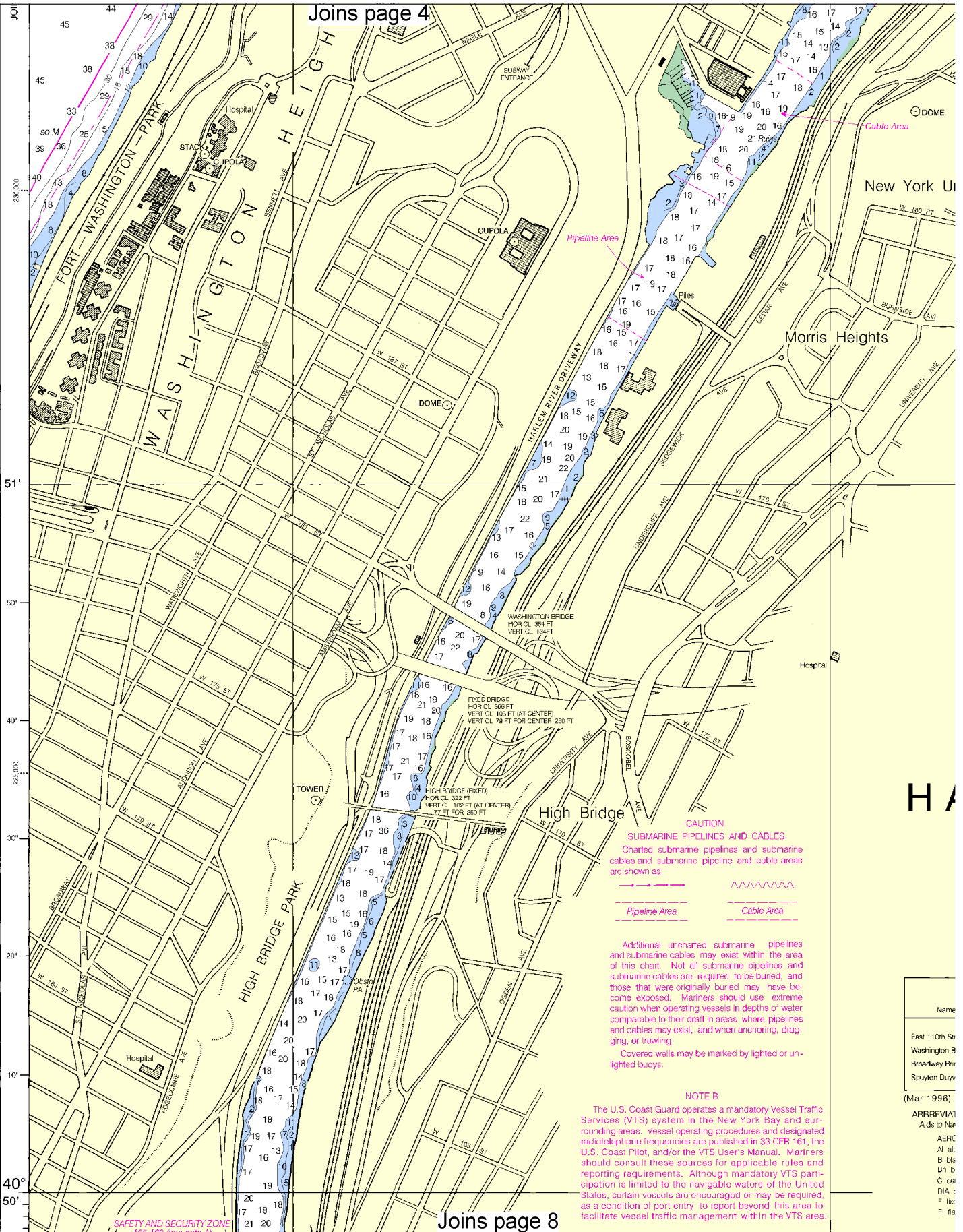
12342

Joins page 7

This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:13333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

5

Joins page 4



Joins page 8

6

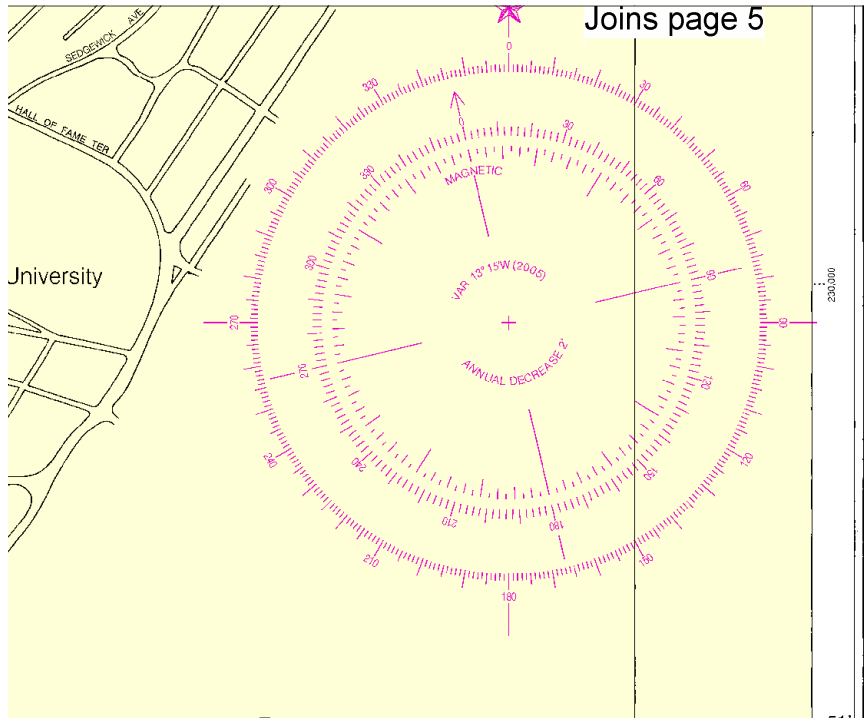


Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.





UNITED STATES - EAST COAST
NEW YORK

ARLEM RIVER

Mercator Projection
Scale 1:10,000 at Lat. 40°50'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

TIDAL INFORMATION

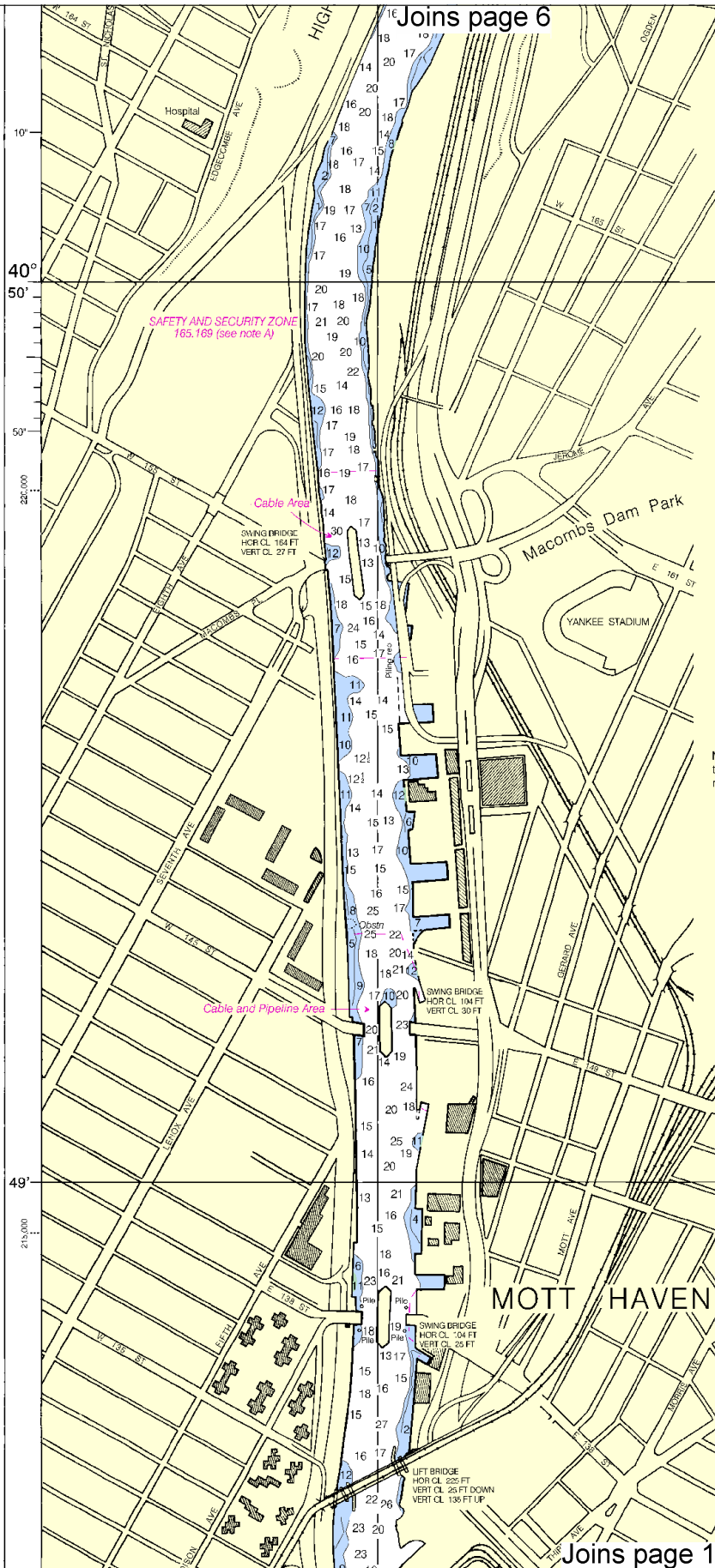
Place (Lat/Long)	Height referred to datum of soundings (MLLW)			
	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
Street (40°47'N/73°56'W)	5.7	5.4	0.2	-4.0
n Bridge (40°51'N/73°56'W)	4.9	4.6	0.2	-3.5
Bridge (40°52'N/73°55'W)	4.3	4.0	0.2	-3.5
uyvil Creek (40°53'N/73°56'N)	4.3	4.0	0.2	-4.0

3) Latest available information

NOTATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Navigation lights are white unless otherwise indicated:

AO aeronautical	G green	Mo morse code	R TR radio tower
alternating	IO interrupted quick	N nun	Rot rotating
black	Is isophase	OBSC obscured	s seconds
l beacon	LT HO lighthouse	Oc occulting	SEC sector
can	M nautical mile	Oi orange	St M statute miles
A diaphone	m minutes	Q quick	VO very quick
fixed	MICRO TR microwave tower	R red	W white
flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Joins page 6



Some cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

NOTE B

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the New York Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. Mariners should consult these sources for applicable rules and reporting requirements. Although mandatory VTS participation is limited to the navigable waters of the United States, certain vessels are encouraged or may be required, as a condition of port entry, to report beyond this area to facilitate vessel traffic management within the VTS area.

NOTE Z

NO-DISCHARGE ZONE, 40 CFR 140

Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or cocked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.362" northward and 1.511" eastward to agree with this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

Fixed and floating obstructions, some submerged, may exist within the magenta tinted bridge construction area. Mariners are advised to proceed with caution.

Name

East 110th St
Washington B
Broadway Bn
Spuyten Duyv

(Mar 1996)

ABBREVIAT

Aids to Nar

AERC
Al alt
B bts
Bn b
C csa
DIA c
f fix
f file

Bottom che

Bkts

Bk b

Cy c

Miscellaneous

AUTH

ED c

2L V

(2) F

Temporary ch
navigation are not
Local Notice to Ma
During some w
gered by ice, cer
replaced by other t
see U.S. Coast Gui

FISH

Boundary lines

thus:

Submerged pili

PLANE C

(base)

The New York S

by dotted ticks:

1 2
To find SPEED, place one point
right point on 60 and left point will

200 0

MAGNETIC

VAR 13° 15' W (2005)

ANNUAL DECREASE 2'

Joins page 10

Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.

8



Place (Lat/Long)	Height referred to datum of soundings (MLLW)			
	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
Street (40°47'N/73°56'W)	5.7	5.4	0.2	-4.0
n Bridge (40°51'N/73°56'W)	4.9	4.6	0.2	-3.5
Bridge (40°52'N/73°55'W)	4.3	4.0	0.2	-3.5
uyil Creek (40°53'N/73°56'N)	4.3	4.0	0.2	-4.0

3) Latest available information

NOTATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Navigation lights are white unless otherwise indicated:

RO aeronautical	G green	Mo moose code	R TR radio tower
alternating	IO interrupted quick	N nun	Rot rotating
black	iso isophase	OBSC obscured	s seconds
i beacon	LT HO lighthouse	Oc occulting	SEC sector
can	M nautical mile	Or orange	St M statute miles
A diaphone	m minutes	Q quick	VQ very quick
fixed	MICRO TR microwave tower	R red	W white
flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

characteristics:

ds borders	Co coral	gy gray	Oys oysters	so soft
broken	G gravel	h hard	Rk rock	Sh shells
y clay	Grs grass	M mud	S sand	sy sticky

notes:

JTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
existence doubtful	PA position approximate	Rep reported	

L Wreck, rock, obstruction, or shoal swept clear to the depth indicated.

J Rocks that cover and uncover, with heights in feet above datum of soundings.

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

CAUTION

changes or defects in aids to navigation are indicated on this chart. See Mariners.

Winter months or when endangers navigation are types or removed. For details consult Light List.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

New York, NY KWO-35 162.55 MHz

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 2 for important supplemental information.

3H TRAP AREAS

is of fish trap areas are shown

illing may exist in these areas.

COORDINATE GRID

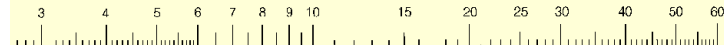
sed on NAD 1927)

State Grid is indicated is at 5,000 foot intervals.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

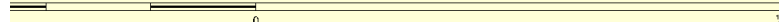
LOGARITHMIC SPEED SCALE



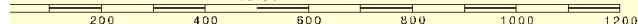
Unit of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots

SCALE 1:10,000

Nautical Miles



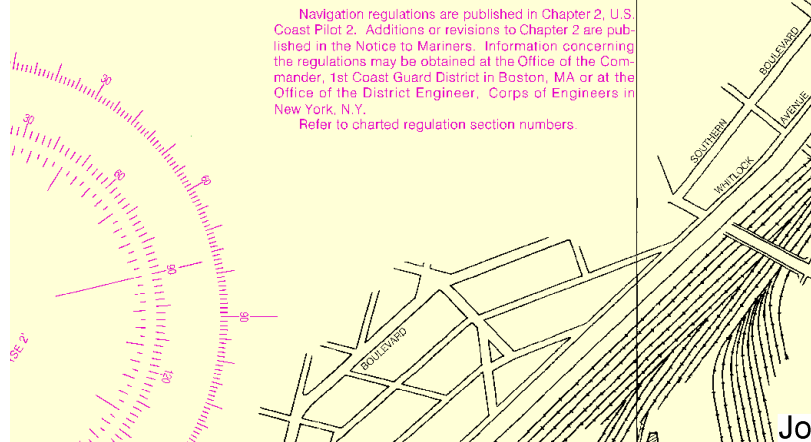
Yards

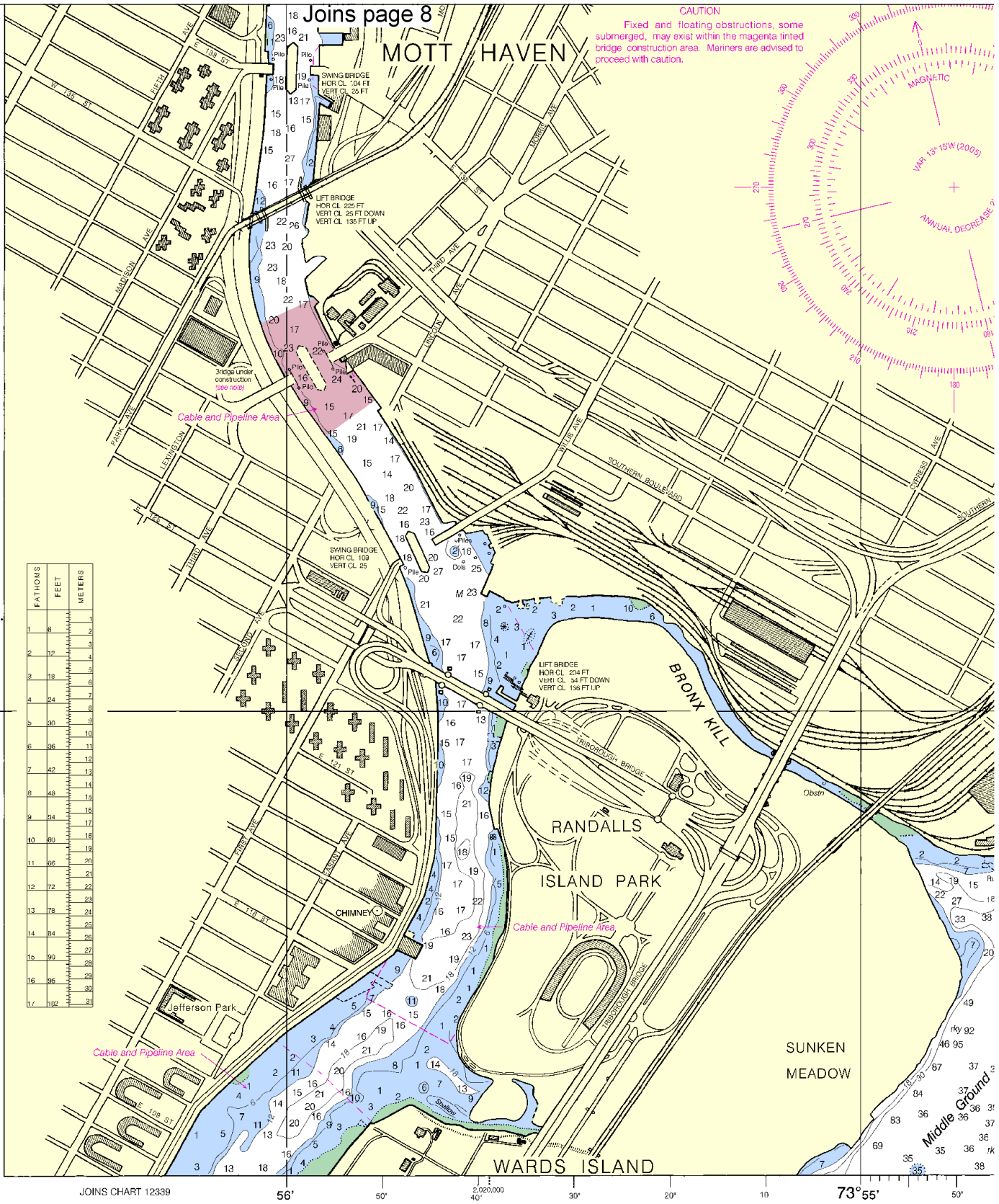


NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in New York, N.Y.

Refer to charted regulation section numbers.





23rd Ed., Jan./05 ■ Corrected through NM Jan. 01/05
Corrected through LNM Dec. 21/04

12342

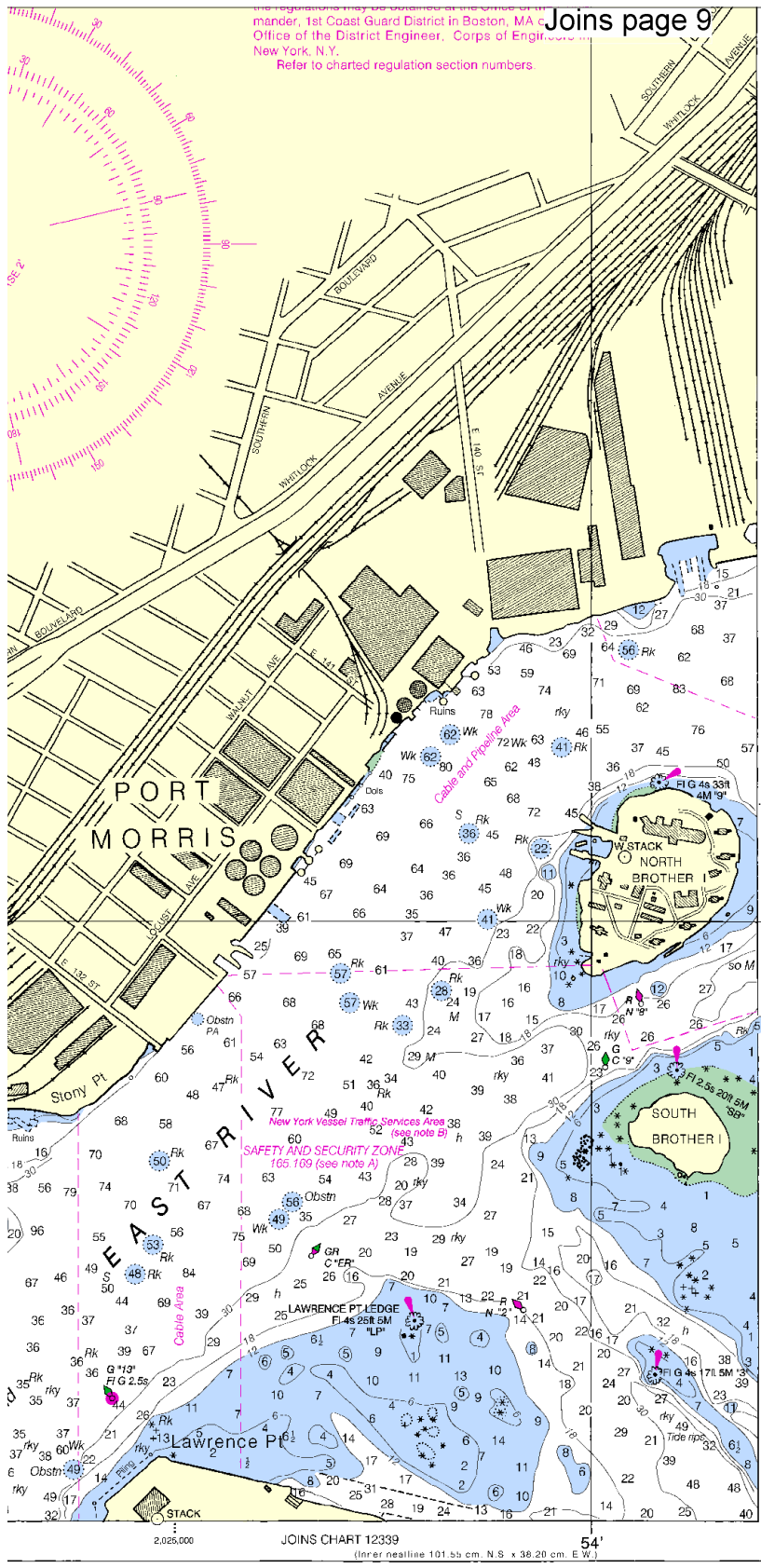
Printed at reduced scale.

SCALE 1:10,000

See Note on page 5.

10





Joins page 9

the regulations may be obtained at the Office of the
Commander, 1st Coast Guard District in Boston, MA or
Office of the District Engineer, Corps of Engineers
New York, N.Y.
Refer to charted regulation section numbers

JOINS CHART 12339

ED NO. 23

NSN 7642014010375
NGA REFERENCE NO 12XHA12342

D.C.
MERCE
ADMINISTRATION
ICE

Harlem River
SOUNDINGS IN FEET - SCALE 1:10,000

12342

SOUNDINGS IN FEET

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Group Activities New York – 718-354-4120

Coast Guard Kings Point – 516-466-7135

Coast Guard New York – 718-354-4101

New York State Police – 877-672-4911

New York City Police – 718-765-4100

Coast Guard Atlantic Area Cmd – 757-398-6390

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S., including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.